

69/355987

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C22C 21/02, 21/04	A1	(11) International Publication Number: WO 98/38347 (43) International Publication Date: 3 September 1998 (03.09.98)
<p>(21) International Application Number: PCT/AU98/00115</p> <p>(22) International Filing Date: 24 February 1998 (24.02.98)</p> <p>(30) Priority Data: PO 5268 24 February 1997 (24.02.97) AU</p> <p>(71) Applicant (for all designated States except US): CAST CENTRE PTY. LTD. [AU/AU]; c/o Dept. of Mining, Metallurgical Engineering, The University of Queensland, St. Lucia, QLD 4072 (AU).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): BARRESI, Joseph, Giovanni [AU/AU]; 17 Mary Byrant Court, Mill Park, VIC 3082 (AU). COUPER, Malcolm, James [AU/AU]; 49 Oronsay Crescent, Diamond Creek, VIC 3089 (AU). ST JOHN, David, Henry [AU/AU]; 26 Gladstone Street, Indooroopilly, QLD 4068 (AU). EDWARDS, Geoffrey, Alan [AU/AU]; 18 Highview Terrace, Daisy Hill, QLD 4127 (AU). WANG, Hao [CN/AU]; 14/29 Villa Street, Annerley, QLD 4103 (AU).</p> <p>(74) Agent: GRIFFITH HACK; 509 St. Kilda Road, Melbourne, VIC 3004 (AU).</p>		<p>(81) Designated States: AU, JP, KR, NZ, US.</p> <p>Published <i>With international search report.</i></p>
<p>(54) Title: FOUNDRY ALLOY</p> <p>(57) Abstract</p> <p>An aluminium-based alloy having 6.5 – 7.5 wt.% silicon and 0.35 – 0.50 wt.% magnesium as the major alloying elements and a method of manufacturing an article from the alloy are disclosed. The alloy is characterised by a microstructure in which β phase (Al_5SiFe) that forms during heat treatment as a transformation product of π phase ($Al_3Si_2Mg_3Fe$) is the sole or predominant iron-containing phase in the alloy.</p>		

0335987 11399